

# Doctorate of Nursing Practice Students' Impressions of Uses for Visual Thinking Strategies

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## Abstract

**Background:** Visual Thinking Strategies (VTS) is a structured art viewing technique designed to teach critical thinking and aesthetic appreciation. Literature on how VTS might be used in nursing is just emerging.

**Methods:** This qualitative descriptive study examined written responses to how 14 doctorate of nursing practice students felt that they might use VTS in their practice after engaging in a classroom session.

**Results:** Three themes emerged for how nurses might use VTS: as a teaching tool, changing thinking in practice, and facilitating communication.

**Conclusions:** This study contributes to the growing body of literature which suggests that art and VTS and can be used in nursing with practitioners of all levels to promote conversations that involve listening intently and considering others possibilities.

**Keywords:** *Aesthetics, Nursing education, Doctorate of nursing practice education, Teaching strategies, Visual Thinking Strategies,*

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18       The fundamental philosophy that nursing is as an art and a science has led some  
19 educators to look for ways to use art to help learners develop professional skills and attitudes  
20 (Moorman & Hensel, 2016). Grounded in social learning theory, Visual Thinking Strategies  
21 (VTS) is a structured art viewing technique of interest that can facilitate the development of  
22 aesthetic understanding and critical thinking skills (Housen, 2001& 2002). Much as nurses are  
23 thought to develop skills sequentially from novice to expert (Benner, 1982), Housen (2001)  
24 theorized that the ability to understand art images develops in five stages beginning with an  
25 accountive stage where novices make concrete observations gained from the senses (See Table ).  
26 As skills develop, viewers move through constructive, classifying, and interpretive stages until  
27 finally reaching a re-creative stage where they are able to fuse personal with universal  
28 knowledge.

29       Under the guidance of a trained facilitator, VTS integrates fact-finding, questioning,  
30 speculating, and personal association to help individuals move to deeper levels of understanding  
31 (Yenawine, 1997). Using Housen's (2001) method, the facilitator typically selects three works of  
32 art mindful that more abstract pieces inspire a richer diversity of interpretation. Sessions  
33 traditionally have been held in an art museum but can also be successfully modified for use in  
34 the classroom using projected images (Moorman, Hensel, Decker, & Busby, 2016). Three  
35 standard open-ended questions are used to guide discussions: *What is going on in this picture?*  
36 *What are you seeing that makes you say that?* and *What more can you find?* According to the  
37 educational philosophies of Lev Vygotsky (1993), students are more likely to synthesize learning  
38 when engaging and socializing together, and Housen suggests that repeated practice with these

three questions in VTS sessions help learners gain a new approach for discovering deeper meanings. The discussions that ensue provide a multitude of opportunities to work in groups and develop communication and observational skills. Maximum student participation and expansion of thought are enhanced through the use of techniques such as modeling mutual respect, listening intently, and paraphrasing (Moorman, 2013).

Originally created as an educational strategy for children, educators are beginning to recognize that VTS holds value in higher education including the health sciences (Hailey, Miller, & Yenawine, 2015; Ludwig 2006; Moorman & Hensel, 2016). VTS has been used to improve attention to detail during physical assessment, improve sensitivity and communication, and increase collaboration (Jasani, & Saks, 2013; Klugman, Peel, & Beckmann-Mendez, 2011; Miller, Grohe, Khoshbin, & Katz, 2013; Naghshineh et al., 2008; Reilly, Ring, & Duke, 2005). In the field of nursing, undergraduate students have reported that the techniques used in a VTS session created a safe learning environment and helped them see things differently (Moorman, 2015). Another study found that undergraduate nursing students perceived gaining observational, cognitive, interpersonal, and intrapersonal skills after participating in a single VTS session (Moorman et al., 2016). However, very little is known about how VTS might be used among experienced nurses in leadership positions. The purpose of this project was to explore perceptions of how nurses enrolled in a Doctorate of Nursing Practice (DNP) program perceived that they might use VTS in their practice.

## Method

Fourteen DNP students, enrolled in a leadership-based program, participated in a classroom VTS session led by a trained facilitator. The group viewed three works of art and then were asked the three standard VTS session questions. Following the session the participants

voluntarily provided written feedback to two open-ended questions: 1. *What was your impression of Visual Thinking Strategies?* and 2. *How might you use Visual Thinking Strategies in your nursing or leadership?* All participants gave written consent to study their de-identified responses and the university's institutional review board deemed the project as non-human subject's research. Data were analyzed using the qualitative descriptive approach described by Sandelowski (2000) with Dedoose Version 7.5 software.

## Results

The VTS session was generally well received as being enjoyable and having applications for practice. Three themes emerged for how participants might use VTS: as a teaching tool (N=13 excerpts), changing thinking in practice (N=7 excerpts), and facilitating interpersonal relations (N=14 excerpts).

### *Facilitating Interpersonal Relations*

Review of the responses revealed 14 excerpts that reflected using VTS to address some aspect of interpersonal relations including using it as a way to improve communication. One participant wrote, "We would use these techniques to interview patients, to talk with students, or meet with other professional." Another wrote, "It (VTS) helps to engage others. From a leadership perspective, it is important to listen." Another participant felt that VTS could "tear down barriers to communication thus improve quality and safety." Using VTS as a method for socialization was mentioned twice. One participant described its use to begin an interdisciplinary activity, "I could see this as being a great ice breaker at the start of our simulation for the NICU team, MDs NNPs, RTs, RNs, etc."

### *Changing Thinking in Practice*

Describing how VTS might be used in practice as tool to for problem solving or decision making was found in 7 excerpts exemplified in the statement, “It was an amazing way of thinking that I will try in my daily work.” Another participant wrote that VTS could be, “Useful in being proactive and help leaders making right decisions. Useful for physicians and nurses to use visual cues and use clinical judgement better.” Two excerpts reflected on how VTS might specifically be used for quality improvement. Specifically, one participant shared, “I believe this would be a great way to start a RCA (root cause analysis) initiative. If we could use this it might open up people to see things differently in the environment or process.”

### *Teaching Tool*

The use of VTS as a teaching tool was described 13 times exemplified in the comments “It was an interesting approach to learning. I can see VTS being useful in multiple learning environments” and included “Impactful teaching strategy especially undergraduate nursing students who have no clinical experience.” Comment addressed the context of the VTS learning environment as well as the perceived outcomes. Much as Moorman (2015) found VTS created a safe learning environment on participant believed VTS could, “...be used for creating a shame free learning environment.” Two participants specifically commented on how VTS could be used to generate out of the box thinking, “...helpful for clinical faculty to push students to think outside the box.” One participant suggested, “I would like to use this in a classroom setting to help students develop their nursing sixth sense and clinical reasoning.”

## **Discussion**

The DNP students in this study perceived that skills learned in VTS had many practice implications including teaching and changing thinking. Other studies have found that pre-

licensure students perceived that VTS helped them learn to see patterns and develop their thinking skills in a nonthreatening way (Moorman, 2015; Moorman et al., 2016). There are striking parallels between how individuals learn to understand art and how Benner (1982) believed nurses gain clinical reasoning skills. Housen (2001) felt discussing art was an ideal way to facilitate the acquisition of critical thinking skills precisely because there are no one right or wrong answer to art interpretation. VTS works on the assumption that viewers are at different stages, and that they must move beyond being passive receivers of information to construct new meanings. Learning to be more open and attentive to others' opinions can help inform student's thinking, which can enhance learning. VTS teaches students to expand other's ideas supporting a group thinking mentality (Moorman et al., 2016). The findings of this study suggest that VTS techniques may be used with nurses of all competency levels to help them gain new perspectives.

Another application these DNP students saw for VTS was facilitating communication with patients, students, and colleagues. Pre-licensure students have also reported that they could apply the communication techniques modeled by the facilitator to help them better communicate with their patients and other team members (Moorman et al., 2016). Housen (2001) believed that the techniques used in VTS invited communication and generated motivational listening where participants genuinely wanted to hear other's ideas and incorporate them into their personal interpretations. As a VTS facilitator demonstrates an understanding of each student's response, they model mutual respect which in turn facilitates further communication (Moorman, 2013).

The term *facilitate* has been defined as "to make easier" or "help bring about" (<http://www.merriam-webster.com/dictionary/facilitate>). Core competencies for nurse educators

include facilitating learning and facilitating learner development and socialization (Halstead, 2007). As facilitators, nurse educators are expected to create a safe environment for students that promotes reflection and the achievement of learning outcomes while also coaching students solve problems and acquire professional values and behaviors (Benner, Sutphen, Leonard, & Day, 2009; Billings & Halstead, 2013; Halstead, 2007). Yet learning how to facilitate may be challenging for a novice educator. The key to student engagement with VTS may be successful facilitation. In depth interviews with undergraduate nursing students who had engaged in VTS found that the facilitator was key to their participation (Moorman, 2013). Students described how the facilitator guided the conversation and elicited conversation, never making them feel criticized or judged. The students reported that this way of interacting made it much more likely that they would participate and helped them go deeper into their own thinking. The findings of the current study suggest that one of VTS's greatest potentials may indeed be providing leaders and educators with an exemplar of how to facilitate. Future research is needed to understand if training in VTS facilitation techniques can improve general teaching abilities.

This study contributes to the growing body of literature which suggests that art and VTS and can be used in nursing with practitioners of all levels to promote conversations that involve listening intently and considering others possibilities. This study examined DNP student's perceptions but stopped short of assessing if the participants actually used any skills learned from the session in their practice. Future studies are needed to examine how skills learned in VTS translate to practice.

#### Web Resources

<http://www.vtshome.org/>

[http://www.qsen.org/modules/module11/files/qsen\\_module11\\_part4/](http://www.qsen.org/modules/module11/files/qsen_module11_part4/)

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Table

Comparison of Benner and Housen Stages.

Stage	Nursing Skill Development (Benner, 1982)	Aesthetic Stages (Housen, 2001)	Common Themes
I	Novice: Use of context free rules to guide actions	Accountive: Concrete observations gained from senses and personal knowledge	Context free concrete reasoning
II	Advanced beginner: Recognizes recurrent meaningful situational components or aspects	Constructive: Building frameworks for looking at art. Use accessible and logical tools and personal knowledge	Finding frameworks to guide thinking
III	Competent: Creating plans based on analytical and abstract contemplation of the problem	Classifying: Adopting a more analytical perspective placing things within a historical context	Use of an analytical approach
IV	Proficient: Perceiving situations as wholes using maxims to guide actions. Recognizes when picture does not represent the expected	Interpretive: Symbols emerge and works meaning emerge as critical skills enhance the personal encounter	Finding deeper meanings
V	Expert: Intuitive use of vast personal experience	Re-Creative: Merging of personal and universal knowledge	Reasoning that supersedes logic